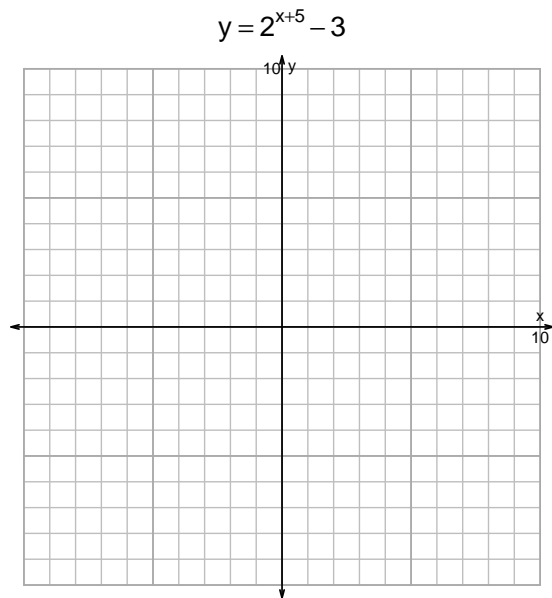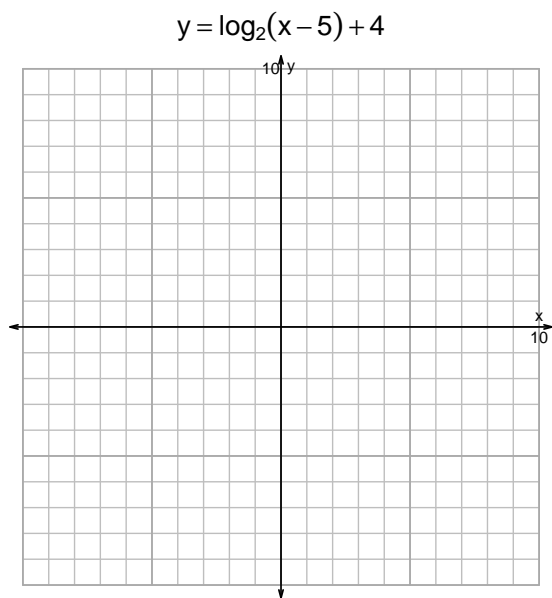Name: _____   Date: _____
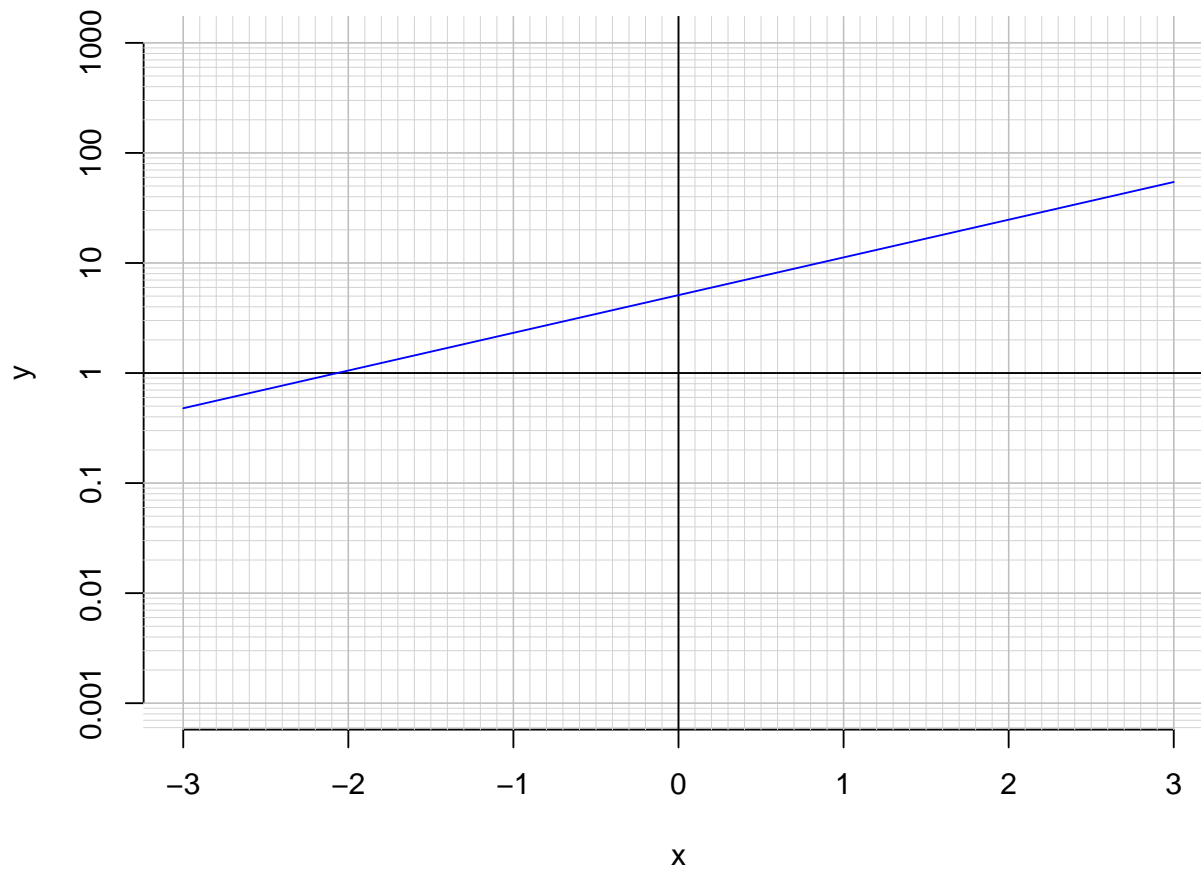
s18quiz: EXP LOG (Practice v140)

1. Graph $y = \log_2(x - 5) + 4$ and $y = 2^{x+5} - 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x - 5) + 4$$

$$y = 2^{x+5} - 3$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-17 = \left(\frac{-4}{7}\right) \cdot 2^{5t/3}$$

3. An exponential function $f(x) = 5.11 \cdot e^{0.789x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-2.2)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(7)$.